

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/707,338	09/03/96	HILL J	ATC101

GERALD E LESTER  
22107 FIELDER  
KATY TX 77450

LM51/1120

EXAMINER

VAIL, S

ART UNIT

PAPER NUMBER

2775

DATE MAILED:

11/20/97

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
**08/707,338**

Applicant(s)

**Hill, Jr.**

Examiner

**Seth D. Vail**

Group Art Unit

**2415**



☒ Responsive to communication(s) filed on Sep 3, 1996

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-23 is/are pending in the application

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☒ Claim(s) 1, 3-19, and 21-23 is/are allowed.

☒ Claim(s) 20 is/are rejected.

☒ Claim(s) 2 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites the limitations "said video signal data rate" in lines 32 and 33, "said video signal resolution" in line 36, and "said video image information" in line 37. There is insufficient antecedent basis for these limitations in the claim.

### ***Claim Objections***

2. Claim 2 is objected to because of the following informalities:

On page 33, line 32, "said microprocessor means," should be deleted.

Appropriate correction is required.

### ***Allowable Subject Matter***

3. Claims 1, 3-19, and 21-23 are allowed.
4. Claim 2 would be allowable if rewritten or amended to overcome the objection set forth in this Office action.

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5. Claim 20 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action.

6. The following is a statement of reasons for the indication of allowable subject matter:

The invention as claimed in each of applicant's independent claims 1, 2, 20, 21, 22, and 23, when considered as a whole, is not taught nor suggested by the prior art now made of record. Applicant claims an electronic control system for flat panel displays which automatically accommodates video signals of numerous types and formats, including VGA, SVGA, XGA, NTSC, PAL, SECAM, and all other forms of RGB video. The video signals may be interlaced, non-interlaced, or composite, or have separated horizontal and vertical synchronization signals. Color images are automatically reduced to grey scale monochrome when a monochrome flat panel display is used. A power saving feature provides for automatic power down when video reception is interrupted, and power up when the video reception is reacquired. Images are automatically, and under user control, upsized and downsized, and positioned and oriented to fit the flat panel display being used.

Applicant's disclosure cites Miller (U.S. Patent No. 5,442,371), Golston (U.S. Patent No. 5,327,240), and Kato (U.S. Patent No. 5,227,882) for disclosing electronic control systems for flat panel displays which can accommodate either interlaced or non-interlaced video signals, and which can separate horizontal and vertical synchronization signals from a video signal. Kato also refers to and claims a capability to automatically detect video formats and provide asynchronous

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video input and output, but, in fact, is incapable of asynchronous operation as the system for outputting video data is dependent on the input read rate.

Applicant's disclosure also cites Zenda (U.S. Patent No. 5,293,485), Furuya (U.S. Patent No. 5,193,069), and Inoue (U.S. Patent No. 4,922,237) for teaching electronic control systems for flat panel displays which accommodate color to color and color to monochrome processing of video signals. Zenda discloses a complex system which uses a color palette in supplying color signals to a computer CRT, but the system does not support NTSC, PAL, or HDTV video formats. Furuya provides a color to grey scale conversion, but fails to teach how the conversion is accomplished. Inoue discloses character conversion only, and cannot perform color to monochrome conversion for graphics.

Asprey (U.S. Patent No. 5,576,723) is notable for teaching a converter for converting color analog VGA video signals to analog monochrome gray scale video signals, however, the conversion process is only for VGA color signals.

Asprey (U.S. Patent No. 5,299,306) is relevant for teaching an apparatus for simultaneously coupling computer video signals to a local color monitor and a distant monochrome monitor, with the color signals displayed on the monochrome monitor as a different shade of gray in accordance with a reduction factor of a voltage reduction means. However, this invention also provides conversion for only VGA color signals.

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Kambayashi (U.S. Patent No. 4,841,289) provides an interface circuit for adapting a multiscan display monitor to receive color display data from various types of external sources, the interface circuit selecting only one of the various types of external sources.

7. As allowable subject matter has been indicated, applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

### *Specification*

8. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

9. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

10. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

11. The disclosure is objected to because of the following informalities:

On page 3, line 41, the word "a" should be deleted.

Appropriate correction is required.

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### *Responses*

12. Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231. If applicant desires to fax a response, (703) 308-9051 may be used for formal communications or (703) 305-9724 for informal or draft communications. NOTE: A Request for Continuation (Rule 60 or 62) cannot be faxed.

Please label "PROPOSED" or "DRAFT" for informal facsimile communications. For after final responses, please label "AFTER FINAL" or "EXPEDITED PROCEDURE" on the document.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

### *Inquiries*

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seth D. Vail, whose telephone number is (703) 305-4008. The examiner can normally be reached on Monday through Thursday from 6:30 a.m. to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark R. Powell, can be reached on (703) 305-9703.

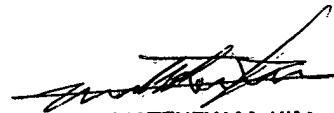
Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [mark.powell@uspto.gov].

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All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist, whose telephone number is (703) 305-3900.

SDV  
November 4, 1997



MATTHEW M. KIM  
PRIMARY EXAMINER  
GROUP 2300